PATENT ABSTRACTS OF JAPAN

(11) Publication number:

11-097583

(43) Date of publication of application: 09.04.1999

(51)Int.CI.

H01L 23/12

H01L 25/10 H01L 25/11

H01L 25/18

(21)Application number: 10-120291

(71)Applicant: LG SEMICON CO LTD

(22)Date of filing:

30.04.1998

(72)Inventor: JIYOOHAN KIMU

JINNSUN KIMU

(30)Priority

Priority number : 97 9747075

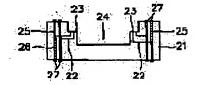
Priority date: 12.09.1997

Priority country: KR

(54) SEMICONDUCTOR SUBSTRATE, SEMICONDUCTOR PACKAGE AND MANUFACTURE OF SEMICONDUCTOR PACKAGE AND MULTILAYERED SEMICONDUCTOR PACKAGE MODULE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a semiconductor substrate capable of high integration, a semiconductor package using the semiconductor substrate and a manufacturing method of the semiconductor package and a multilayered semiconductor package module. SOLUTION: In a semiconductor substrate which has step-difference portions 23 whose upper surfaces are almost horizontally formed on the upper surface and the almost central part of a nonconductive substrate body 21 and in which a cavity 24 accommodating a semiconductor chip is cut and formed, a plurality of viaholes 25 penetrating the upper and the lower surfaces of the substrate main body 21 are bored and formed in the substrate body 21 around the cavity 24, and a plurality of electric wires 22 serving as wirings to the semiconductor chip are so arranged inside the substrate body 21 that the upper surfaces of the stepped portions 23 and the insides of the viaholes 25 are connected. Thus the semiconductor substrate is constituted. The



semiconductor chip is stuck in the cavity 24 of the semiconductor substrate, the viaholes 25 are filled with metal bars 26 composed of conductive material, and a semiconductor package is constituted. A multilayered semiconductor package module is constituted by stacking a plurality of the semiconductor packages.

LEGAL STATUS

[Date of request for examination]

30.04.1998

[Date of sending the examiner's decision of

rejection]

[Kind of final disposal of application other than

- the examiner's decision of rejection or application converted registration]
- [Date of final disposal for application]

[Patent number]

2967344

[Date of registration]

20.08.1999

[Number of appeal against examiner's decision

of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office